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THE MORAL GULPH BETWIXT MAN AND THE BRUTE

In Essay

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CHARLES WALLWYN RADCLIFFE COOKE, B.A.

LATE SCHOLAR OF RUMANUEL COLLEGE, CAMBRIDGE, AND LE BAS UNIVERSITY PRIZEMAN, 1864.

Separat hos nos prege contorum, abyue iden venerabile ach cortiti itsenium, divinorumque capaces tapic exercinis rapioniisque artibus apti ensure a colesti demissum traximus arce ams event promo et terram specientis. Monto principa indulait rommunis conditor illosantum atimas, nobes animum quoque,—

Jun.

Cambridge and London: MACMILLAN AND CO.

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THE MORAL GULPH BETWIXT MAN AND THE BRUTE.

An Essay

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CHARLES WALLWYN RADCLIFFE COOKE, B.A.

LATE SCHOLAR OF EMMANUEL COLLEGE, CAMBRIDGE, AND LE BAS UNIVERSITY PRIZEMAN, 1864.

Separat hoc nos a grege mutorum, atque ideo venerabile soli sortiti ingenium, divinorumque capaces atque exercendis capiendisque artibus apti sensum a calesti demissum traximus arce cujus egent prona et terram spectantia. Mundi principio indulait communis conditor illis tantum animas, nobis animum quoque.—

Juv.



Cambridge and London:

MACMILLAN AND CO.

1866.

265. f. 38.

Cambridge:

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THIS ESSAY OBTAINED THE BURNEY PRIZE IN THE UNIVERSITY OF CAMBRIDGE IN THE YEAR 1865—66.

The late Richard Burney, Esq., M.A., of Christ's College, Cambridge, previously to his death on the 30th Nov. 1845, empowered his Cousin, Mr Archdeacon Burney, to offer, through the Vice-Chancellor, to the University of Cambridge, the sum of £3,500 Reduced Three per Cent. Stock, for the purpose of establishing an Annual Prize, to be awarded to the Graduate who should produce the best Essay on a subject to be set by the Vice-Chancellor.

On the day after this offer was communicated to the Vice-Chancellor, Mr Burney died; but his sister and executrix, Miss J. Caroline Burney, being desirous of carrying her brother's intentions into effect, generously renewed the offer.

The Prize is to be awarded to a Graduate of the University, who is not of more than three years' standing from admission to his first degree when the Essays are sent in, and who shall produce the best English Essay "on some moral or metaphysical subject, on the Existence, Nature, and Attributes of God, or on the Truth and Evidence of the Christian Religion." The successful Candidate is required to print his Essay; and after having delivered, or caused to be delivered, a

copy of it to the University Library, the Library of Christ's College, the University Libraries of Oxford, Dublin, and Edinburgh, and to each of the Adjudicators of the Prize, he is to receive from the Vice-Chancellor the year's interest of the Stock, from which sum the Candidate is to pay the expenses of printing the Essay.

The Vice-Chancellor, the Master of Christ's College, and the Norrisian Professor of Divinity, are the Examiners of the Compositions and the Adjudicators of the Prize.

In the event of the exercises of two of the Candidates being deemed by the Examiners to possess equal merit, if one of such Candidates be a member of Christ's College, the Prize is to be adjudged to him.

The subject proposed by the Vice-Chancellor for the year 1865—66 was:—

"The Moral Gulph betwixt Man and the Brute."

PREFACE.

THE Author having received permission from the Examiners to make some necessary corrections in the MS. has endeavoured to render the alterations as few as possible. One or two explanatory notes have been added, the Author preferring to refer the reader to some of the chief opponents of Mr Locke's theory respecting innate ideas rather than give their opinions at length in the text.

EMMANUEL COLLEGE, June 1, 1866.

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CHAPTER I.

INTRODUCTION.

Supposing that a boy, the child of savage parents, of parents whose intellectual faculties were of the lowest order, were to be cast on a desert island at so early an age as barely to be able to provide for his subsistence by plucking such berries and fruits as growing in profusion might come within his reach; would such a child grow up more nearly resembling in habits, tastes, manners, and mental development an average man, or an average brute?

I incline to the opinion that he would resemble the brute more nearly than the man: and I do so on the following grounds.

I suppose the boy to have been cast on the island at so tender an age that were it not for the exceeding mildness of the climate, and the abundance of attractive fruit within his reach, he must infallibly have perished. At such an age the ideas of sensation received by him must have been very few; limited, perhaps, to the ideas of pleasure and pain derived from the feelings of hunger and thirst, and their gratification, and to some faint ideas of his parents, and the objects surrounding his home; ideas so faint indeed as to be entirely forgotten after the lapse

of a few weeks. Of ideas of reflection he would probably have none.

As the child grew up, increased in strength, and wandered farther from the spot where he was at first laid, the sight of some wild beasts would arouse in him those feelings of fright, akin to those of pain, which we see to be so easily excited in the youngest infant, and the natural instinct of self-preservation would lead him to run away, hide himself, or climb into some tree, to be out of the reach of the object of dread; and were he to find that the beast was unable to follow him into a tree he would receive an idea of safety, and would without doubt repair to a tree whenever the sight of a beast should in future fright him. But again, as the mind derives pleasure from the sight of small, harmless creatures, more especially when invested with beauty or grace, by the elegance of their movements, or the colour and variety of their coats, so it is to be supposed that the sight of some birds, reptiles, and the smaller mammalia, would give him pleasure, and that he would, after the manner of children and the young of many animals, endeavour to touch or catch some of them. This he would probably succeed in doing; and in playing with some bird, or small beast, he would in all likelihood kill it, or at all events, in plucking it to pieces would lay bare the flesh and draw blood, and as in the course of his search after his usual food, berries and fruits, he would be in the habit of putting most things he laid hold of into his mouth, so would he put therein the particles of blood and flesh, which would doubtless be as agreeable to his taste as many of the wild plants, herbs, and berries, on which he had hitherto fed, so that he would now have an 'additional object in pursuing and capturing birds and beasts, that of procuring food; and in proportion as his tastes inclined him to prefer flesh to fruit, or a scanty supply of the latter forced him to seek more diligently for the former, he would become fleet of foot and cunning in devices to surprize and capture his prey. And in procuring food for his sustenance would consist his sole occupation. The mildness of the climate would not necessitate the building of a hut, or even so much as the burrowing of a lair in the ground. I should suppose that his restingplace for the night would be determined by accident, and that he would not resort to any one spot as evening approached, for in his solitary condition all his business would be to eat, drink, and sleep, and it is probable that after a surfeit of fruit or flesh he would rest on, or near, the spot where he ate his last meal. In my opinion, therefore, a man so placed would scarcely merit the name of human being. All the faculties of the mind, the possession of which, as I shall presently show, asserts the preeminence of man over the brute, would be in abeyance, inasmuch as no ideas would be received into the mind which would call them into use. The absence of others of his species would be the chief cause of this dearth of ideas; especially of ideas from reflection; for had we supposed the case of several children of both sexes exposed at an early age on a desert island, I would fain believe that they would have grown up very different from the brutish monster I have just depicted. Foremost amongst the causes of this difference I would place language and parental affection and care. The solitary man, not having one of his species wherewith to consort, could never have any notion of the intercommunication of ideas, and would probably never give utterance to anything more intelligible than some inarticulate sounds expressive of pleasure or pain; but the children on a desert island, although at the time of their exposure they might not have the faintest conception of language, would, under

the influence of common feelings, common interests, the promptings of nature, and numberless other causes, soon manufacture some rude means of interchanging simple ideas, which, even if we suppose those means to be limited to mere signs and gestures, would at once tend to raise them immeasurably above the solitary savage. I do not, however, suppose for a moment that the medium of communication would be limited to mere signs and gestures. Gifted as man is with most wonderful and complex organs of speech, I do not doubt but that, as the easiest and readiest method of interchanging ideas, these islanders would make use of their voice as the chief instrument. although they would certainly employ as minor agents gesture, peculiarity of intonation, and physical signs, to a far greater extent than would civilized people: for we find it to be almost an invariable rule in real life that the more savage the nation the more profuse the use of signs and animated gestures to supplement speech and to supply the place of those words and combinations of words (symbols of general ideas for the most part) which, by reason of the imperfect and incomplete state of the language, cannot be expressed by vocal sounds.

Thus would the germ of a primitive language arise; consisting at first of mere names for external objects of sense and of expressions for the simplest and most common natural feelings, desires, and wants, a mere skeleton of a language, but capable on the advent of new ideas, consequent upon the growth of population and the increase and diversity of desires, of being so added to, enlarged, and simplified, as to keep pace with the civilization of the young nation, and become a fit medium of communication when that nation should have reached its highest stage of intellectual development. I have placed the care of and affection for offspring nearly on a par with lan-

guage, in their debrutalizing effects upon the young savages; and I have done so by reason of the vast multitude of new ideas, and the great intensity of feelings and emotions, which will accrue to them, and be excited in them, upon the first occasions of the propagation of their The new ideas gained will rouse the sleeping species. faculties of the mind; and in their anxiety and care for their offspring the members of this embryo nation will get hold of and comprehend the complex and general ideas expressed by us in the words love, tenderness, beauty, growth, &c. to the manifest gain not only of their language, which they will immediately furnish with several new words, but of their intellectual faculties; which, once called into exercise by the strongest natural affection as a prime mover and introducer of fresh ideas, will put them upon making new discoveries for themselves, and at every step advancing further and further from that brutal stage in which the solitary savage must ever remain.

In time too, as the reasoning faculty became in after generations more highly developed and more apt to search out and prove new discoveries from an early exercise in past discoveries, general measures and abstract ideas, which are formed by stripping simple ideas of their accessories, would be perceived by the mind, and some one more ingenious than his fellows would broach the opinion that there was a God. The discovery of fire, which I conceive would take place at an early period of the nation's existence, for experience of fact shows us that no people under the sun, of whom we have knowledge, are ignorant of that element, might, in all probability, induce many to ascribe powers and supernatural influence to such a source of misery and good; and hence would arise a race of Parsees, or fire-worshippers; whilst others, terrified perhaps by some violent convulsion of nature, a hurricane, or an earthquake, for which their ignorance and weak reasoning faculties could assign no adequate cause, would conjure up a mysterious demon to bow down to, and worship,—a terrible personage against whose wrath the human mind would soon conceive the necessity of providing, or imagining, a mild and placable deity; and these two being in after generations blended into the idea of one God, the Creator of the Universe, in time a more or less correct idea of the Almighty would be generally conceived and accepted.

Shortly, to restate my arguments; I venture to assert that one individual man exposed at an early age on some desert spot would grow up more nearly resembling an average brute than an average man, solely because ideas, which alone can rouse the dormant faculties, can never be presented to his mind, and so, after the lapse of time, those very faculties themselves decay to so great an extent that, were such a man to be discovered and brought in the prime of life into contact with civilized people, he would never be anything more than an idiot; but that were two or more human beings of opposite sexes similarly exposed under similar circumstances, the contact with one another, their own society in fact, which nature seems to have designed to be to man what it is not to the brute, an awakener of preexisting faculties, would, of itself alone, serve to start the little community on the road to civilization, the nearness of their attainment to its highest form being determined not so much by the original motive power as by exterior circumstances and advantages.

The attentive reader will perceive that I have adopted the views of the ingenious Mr Locke in holding the opinion that there are no innate principles in man, no innate notions in his understanding, that is, any distinct kind of truths, and much less any practical principles. Had such innate principles existed in the mind of the man whom I suppose to have been exposed on a desert island, it would have been improbable in the last degree for him to have remained, as I have depicted him, in such a brutal and inhuman condition. A consideration of the moral gulph betwixt man and the brute does not necessarily involve a discussion on the presence or absence of innate principles in man; but forasmuch as in the next chapter I purpose to make a few remarks on the order of man's intellect and on the means by which he acquires knowledge, so also shall I have a few words to say upon the question of innate principles in the mind of man'.

¹ For some interesting facts on this subject the reader may refer to a paper on "Wild Men and Beast Children," by Burnet Tylor, in the Anthropological Review, Vol. 1.

CHAPTER IL

THE SENSES OF MAN AND THE FACULTIES OF HIS MIND.

ONE who has read Mr Locke's treatise on the human understanding will readily comprehend my meaning when I say that that discerning gentleman does not so much attempt to prove that man has no innate principles, as to disprove that he has any. He takes the arguments in favour of innate principles and combats them one by one. To be clearer, I will shortly state his mode of procedure, point out some of the most important of his refutations, and humbly, and with all due deference to so great an authority, show to a generous reader those parts especially wherein I consider him to come short of the exact truth and to strain his argument for his argument's sake, as doth a lawyer oftentimes in pleading a weak suit or one not easy to be maintained. I would however premise that in essentials I hold with Mr Locke, and only differ with him in some minor particulars.

To begin then; it has been said that there are innate principles, innate truths in the understanding, but we know very well that there are many so-called innate truths of which men never come to a knowledge at all; which is as much as to say, that although they are in the mind, they are not perceived, or that they are, and are not in the understanding; which is absurd. Again, it is urged that a knowledge of innate principles is not arrived at until man comes to the use of reason, so, that

which was imprinted by nature as the foundation and guide of reason needs the use of reason to discover it! But neither can this be so, for, if it were, the moment a man came to the use of reason he would also come to the knowledge of innate truths; but we see the contrary to be the case, for children reason, but are yet, for the most part, far from any knowledge of the principles called innate, and of general propositions. It is true that men become acquainted with general propositions and so-called innate principles after they come to the use of reason, but this does not prove them to be innate, for, if it did, all the discoveries made by reason, as they are arrived at by the same steps by which general propositions are attained, must also be innate, which was never so much as pretended by any one. In fact, if the so-called innate propositions are not taken notice of until man comes to the use of reason, they do not differ from, nor are better than, other knowable truths.

Moreover, if, as has been said, assent upon first hearing and understanding of the terms be a mark of an innate proposition, we shall be deluged with such, for no one ever sticks at the propositions that two and two make four, or that two bodies cannot be in the same place at the same time, and numberless others, which no one was ever so extravagant as to suppose innate. Moreover, to gain assent these maxims must be proposed or taught, and, if so, how can they be called innate which require to be pointed out and made clearer than Nature has made them?

Innate principles ought, inasmuch as they are innate, to be the first thought on, but such a speculative maxim as "that it is impossible for the same thing to be and not to be," which all upholders of innate principles will acknowledge to be one, has, it may safely be asserted, never

been so much as taken notice of by the majority of mankind, reckoning savages, children, idiots, and women; an assertion which, however safely it can be made, must appear odd to the supporters of innate principles, inasmuch as amongst savages, uneducated persons, and such as are least corrupted by civilization, innate principles, as implanted by nature, should chiefly flourish. Instead of which, as I have said, we find all such uncivilized, rude, primitive people, without any general principles, and with few and narrow notions borrowed only from those objects they have had most to do with and which have made upon their senses the strongest impressions.

If then, speculative maxims, which carry their own evidence with them, can be shown not to be innate, much more so can it be demonstrated that moral principles fall short of innateness, requiring as they do reasoning and some exercise of the mind to discover the certainty of their truth.

Universal assent, which could hardly, if at all, be gained for speculative principles, is found to be impossible of attainment when we come to moral rules and practical principles. The majority of moral maxims, which some would have to be innate, are utterly unknown to the bulk of mankind, and but feebly acknowledged and slowly comprehended by a large section besides, so that to obtain anything like universal assent to them would be utterly impossible, and unless universally assented to they cannot be called innate. That most unshaken rule of morality and foundation of all social virtues, that tie of all communities, "that one should do as he would be done by," does it receive universal assent? When outwardly assented to, is it not practised for the most part as

¹ But see contra Cousin's Lectures on Modern Philosophy.

⁵ See pages 46, 47, and 48.

a rule of convenience, without which society would no longer exist? Then, again, there cannot be innate practical and speculative principles unless their ideas are innate also; and although if any principle be innate this one that "it is impossible for the same thing to be and not to be" is, yet who will say that impossibility and identity are innate ideas? An additional reason too, why it is impossible for moral rules to be innate, is furnished by the fact that they need a proof, for there is no moral rule which can be proposed whereby a man may not demand a proof, which would be absurd if it were innate.

The above are the principal arguments made use of by Mr Locke in disproving the innateness of speculative and practical principles. He goes on then to say that nature has put into man a desire of happiness and an aversion to misery, which are both innate practical principles assented to by all, but that they hardly come under consideration, inasmuch as they are rather inclinations of the appetite to good than impressions of truth on the understanding. Having admitted the universal assent to these principles, I confess I am somewhat surprised to find the same author denying the innateness of such a principle as the desire for the preservation of children by parents, on the ground that it is not universally attended to. For my own part, as I should be loath to deny universal assent to a thing because I found that certain idiots and imbecile persons would not therein agree with the rest of mankind, so would I hesitate to say that the love of children was not a universal principle in man because certain inhuman and depraved parents, void of natural affection, distorted in mind, neglected their children. It appears to me to weaken the force of Mr Locke's previous arguments that when he comes to so important a principle as affection for, and preservation of, offspring, he should, in order to disprove its innateness, bring forward instances to show that it is not universally assented to, a weak argument always, but especially so here, since unsupported; for although he has told us that practical principles differ from speculative, and are, if possible, less innate because they require proof, yet I think it would be almost as absurd for one to demand a reason before assenting to the fact that parents should love their children, as it would be were he, understanding the terms, to hesitate for want of a reason before agreeing to the speculative maxim that two and two make four'. But, holding as I do with Mr Locke, that there are no innate speculative or practical principles implanted in the mind of man, I would refer such natural tendencies as the desire for happiness, the aversion to misery, and the wish for the preservation of, and the affection for children, to a kind of instinct, with which reason has very little to do at all. I should consider them as mysterious feelings, indescribable, indefinable, belonging as much to the physical frame, incasing the mind, as to the mind itself. Moreover, Mr Locke, in my opinion, errs in admitting the desire for happiness and the aversion to misery to be innate practical principles, forasmuch as we do observe that they are not universally assented to (for men have different ideas of happiness and misery), and that some, neither idiots nor imbecile, have been known to prefer what mankind generally call misery to what they generally call happiness.

I have dwelt at some length upon the question of innate principles, because, if it were once admitted and received that such principles are implanted by nature in the mind of man, to the possession of them should we attribute the chief cause of man's excellency over the brute, and

^{1 &}quot;Almost as absurd." The one may require a reason, the other, when the terms are understood, does not.

of the width of the moral gulph between them; for as I have never heard the opinion broached that brutes have innate principles imprinted on their minds, so would I not venture to entertain for a moment what would appear to me to be an absurd and extravagant notion. The denial of innate principles in man, however, places him, so to speak, on a level with the brute in many respects. or. rather I should say, prevents him from standing upon so high an eminence above the latter as to render any thought of drawing a comparison between the two absurd. Since then we have no innate ideas implanted in us by nature, let us mark some few of the steps by which the mind acquires knowledge. In the words of Mr Locke, "Our observation employed either about external sensible objects, or about the internal operations of our minds, perceived and reflected on by ourselves, is that which supplies our understandings with all the materials of thinking. These two are the fountains of knowledge, from whence all the ideas we have, or can naturally have, do spring." That is to say, the sources of all our ideas are but two, sensation and reflection. Our senses convey to our minds our ideas of external objects, and the perception of the operations of our minds upon the ideas it has produces another set of ideas which we call ideas of reflection. Perception is one of the first operations of the understanding, men begin to have ideas as soon as they begin to perceive. it is the inlet of all knowledge into our minds. Now ideas of external objects come to us through our senses, and the fewer or duller they are, the fewer or duller will be the impressions received by them and the fewer or duller the faculties employed about them, so that variation in the power and activity of the senses must be plainly perceived to be a cause of intellectual disparity, whether it be between man and man, brute and brute, or man and brute.

I would however have my reader to observe that be the senses never so sharp, without perception no impression will be conveyed by them to the understanding, so that in dulness or acuteness of perception will perhaps after all lie the principal cause of intellectual disparity, and not so much in dulness or acuteness of the senses. As perception is the first faculty of the mind which is called into operation, so is retention the next. I do not mean simply the faculty of retaining an idea by contemplation in the mind for a length of time, but also the faculty of recalling an idea at will, the importance of which faculty will be more fully perceived when I enter upon a close comparison of man and the brute and set down in order the several faculties belonging to each, deducing therefrom some not altogether unimportant arguments upon the question at issue. Of the other faculties of the mind of man which enable it so to manage and make use of its ideas as to arrive at a right judgment of all knowable things and to assent to all knowable truths, the following are the chief. Discerning, or distinguishing between its several ideas, so as to avoid being misled by similitude or affinity into taking one thing for another; Comparing of its ideas in respect of place, time, and other circumstances; Composition, or compounding its ideas so as to make complex ideas out of simple ones; and lastly Abstraction, or the faculty of making general ideas out of particular ideas.

they be of sensation or reflection, are but of two kinds, simple and complex, and that the materials of all our knowledge are, in the first instance, the simple ideas which we receive through the senses; for the ideas of reflection are got afterwards, by the observation or reflection of the mind itself on its own operations with respect to those simple ideas, whereby arise not only complex

ideas but also an entirely new set or train of ideas, of which, when the mind has been well furnished by experience with a vast store, and has also well exercised faculties wherewith to operate upon them, come all those discoveries and sublime speculations which have been made by, and have occupied, the human mind in all ages past and present.

To show how entirely dependent we are upon our senses for our ideas of things, I would, with Mr Locke, point out the impossibility of conceiving, for instance, the idea of a taste or a scent of which one has had no previous knowledge. Supposing a certain scent to differ from all other scents, then if we have never smelt it no description of it could ever give us an accurate idea of it, inasmuch as the describer would not be able to compare it with any known scent, which, when such general ideas as pungency, diffusiveness, &c. fail to convey anything like a correct impression, would be the only way of pointing out to his hearer a means of coming at something approaching to a right conception of it. We have all heard of the tale of a blind man who, after some one had described to him the appearance of the colour scarlet at great length and in graphic language, declared that he had a perfect idea of the colour now, inasmuch as from the able description he had received of it, he perceived, most clearly, that it resembled, in every particular, the sound of a trumpet.

Complex ideas are formed from simple ideas by the use of those powers or faculties of the mind which I have enumerated above; and I may also add, that without language the general ideas which man could make from simple ones would be very limited, if indeed it were possible to make any at all, since we should, without language, be wanting in outward marks of our internal

ideas; and if man possessed language but not the faculties of abstraction, composition, and comparison, he would be compelled to give a distinct name to every particular idea, and could never make particular ideas to be general. To explain myself more clearly: if man had not the faculties of composition and abstraction he could not, although he were to perceive that milk was white and chalk white, receive or make the complex idea of whiteness, because he could not compound the idea of the whiteness of chalk and the whiteness of milk into a general idea of whiteness; nor could he abstract each particular whiteness from its particular object; and having no faculty of comparison, he would be unable to perceive the similitude between the whiteness of the milk and the whiteness of the chalk, so that he would have to give distinct names to the idea of whiteness derived from

I have here hinted at the impossibility of a man making any general ideas out of simple ones, if he were not possessed of language; and forasmuch as some may say that want of language would not be a bar to such generalization, since deaf and dumb people undoubtedly do form general ideas, I would add that by language I do not only mean vocal articulate sounds, but all marks of whatever kind that may stand for internal ideas, such as signs, gesture, written characters, and the like. That deaf and dumb persons think in finger signs is evident, since it has been observed of some that they talk to themselves on their fingers, sometimes for a considerable length of time. Men who possess all their senses think, as we can prove from ourselves, in words, when they do not think in external objects as in contemplation of scenery, where the thinking of the mind is little more than a calling up of a succession of images. (See Modes of Thinking, page 40).

It has been urged by some writers that it is impossible to form a general idea of whiteness. That one always has in one's mind the idea of some white thing, at the very least of a white plane surface. This might be so if we had no signs, vocal or otherwise, as external marks of our ideas, but having them I do not deem the objection valid. I admit that in talking of whiteness we sometimes think of the external sign, i.e. of the word whiteness and the letters composing it; but I deny that we are obliged to think of some particular white thing when we would form an idea of whiteness.

chalk, and the idea of whiteness derived from milk. Were he wanting in language then, although he might be capable of forming complex and general ideas, they would be useless to him, inasmuch as he could give them no expression nor signify his internal ideas by outward marks1. It will be observed by the attentive reader that there is one faculty of the mind which I have omitted to take notice of, a faculty too which must play an important part in any comparison that may be drawn betwixt man and the brute, I mean the faculty of reason; in the degrees of which most people would place the chief distinction between the two. I omitted any mention of it purposely, with the intention of reserving it until such time as I should compare the mental faculties of man and the brute, which I hope to do in the next chapter. Second thoughts, however, incline me to treat of it here, in order that when I briefly recapitulate the contents of the previous pages, I may present to my readers the whole order of man's intellect; although I am fain to believe I shall do so in such a feeble and insufficient manner as far to fall short of my wishes and intentions.

In a few words then, reason is that faculty, or power of the mind, which, dominating over, making use of, and ordering the other faculties, endeavours by inference or assent to attain to a knowledge of truth. Reason finds out and orders the intermediate ideas between two proposed, so as to find out the connection in each link of the chain, and by a perception of this connection in each step of the induction demonstrates to the mind the agreement or disagreement of the two ideas. Where we are obliged to take propositions for true without being certain they are so, reason investigates the grounds of

their probability. Reason therefore works after the following manner. It discovers and finds out proofs, it lays them in regular and clear order, it perceives their connection, and it draws therefrom a logical conclusion. It will be observed with regard to reason, just as with regard to the other faculties of the mind, that all the materials upon which it works are but ideas simple and complex. Reason therefore fails the mind when its ideas fail, or when its ideas are obscure and imperfect; when also from the ambiguity of words the terms in which propositions are conveyed are dubious and uncertain.

Briefly to recapitulate the contents of this chapter; we find man born with no innate principles, with nothing but certain animal instincts, as the desire for happiness and the aversion to misery, but furnished with senses to convey ideas to his mind, and with faculties to operate upon, enlarge, and multiply the ideas so conveyed. We find moreover, that these senses are the only gateways of knowledge he possesses, and these faculties of his mind the only instruments whereby he can turn that knowledge to good account.

I purpose in the next chapter to compare the mental endowments of man and the brute, and to show that although the latter has in the majority of cases senses more acute than the former, yet that, by reason of a defect in, and an absence of, certain faculties of the mind, he must always come far short of man in moral and intellectual development.

CHAPTER III.

THE BRUTE'S SENSES AND MENTAL FACULTIES COMPARED WITH MAN'S.

Few persons will, I think, be prepared to deny that the senses of man are, for the most part, far less acute than the senses of the brute. No man probably ever had an eye so piercing as an eagle's, an ear so sharp as a hare's, or a nose so keen as a dog's; but I venture to assert that, as originally created, man's senses were far more perfect than they are now, and that had the principle of selection been carried out by man, as it practically is by brutes (who, impelled by some natural instinct, destroy such of their number as may be weakly or defective in any particular1), our senses would at this very day be more generally acute. Even now, did the state of society allow such an experiment to be carried out, I feel convinced that by education of the senses and subsequent selection, a race of men might be raised possessing senses almost as perfect as I assume men to have had in primitive times. We know that the senses can be educated by simple use. The seaman, continually on the look-out, will perceive a sail on

¹ Since writing the above I have heard that rooks, differently from other birds, exhibit much sympathy when one of their fraternity has been killed, or hurt by a shot. They are said, I am told, to hover over their wounded companion uttering cries of distress, and endeavouring to render him all the assistance in their power. I have not had the good fortune myself to witness such a display of sympathy in these birds.

the horizon which is invisible to the landsman, and the Indian, accustomed to traverse pathless forests, will follow the trail of his quarry, or the footsteps of man, in places where the civilized European would be utterly at fault, whilst the ear of the savage, ever on the alert to detect the slightest sound that may warn him of the approach of an enemy, or tell him that his prey is at hand, will be as much sharper than the European's as his eye was more penetrating. I say, therefore, that it would be possible, by causing men and women to educate their senses, and by selecting for intermarriage such only as came up to a certain standard as regarded sense development, and continuing the process through several generations, raising the standard when necessary, to perpetuate a race of human beings in every sense sharper than average men and women of the present day. Of course the habits, tastes, and dispositions of man would preclude such a plan from ever being put into practical operation; and even if it could be, the breaking up of social ties, the utter subversal of society which it would cause, would render the experiment pernicious, and its supposed beneficial effects of little value. In all this I do not mean to say that by carrying out the principle of selection I think the increase of power in the various organs of sense will be constantly progressive; I only mean that they (the organs of sense) might thus in time approach more nearly than they now do to what I consider to have been their original condition. No one would be so extravagant as to imagine that by education and selection man could acquire an eye so piercing as that of the eagle; the conformation of their respective organs proves, beyond all manner of doubt, that it would be impracticable to do so. After all, the ingenuity of man has invented instruments to aid our senses, one of which, the telescope, gives to the sense of

sight at least a far wider range than was ever accorded to the sharpest-eyed lynx in existence. Still, for ordinary every-day use, it is evident that the senses of the brute are superior in the performance of their functions to the senses of man. And through the senses come all the materials of all knowledge. What sublime ideas then must enter the mind of the eagle as soaring on high in the firmament it beholds beneath it a glorious panorama, every part clear and distinct to his sight, which feeble man, shivering in a balloon, sees but dimly with the naked eye, and but in part with assisted vision! No, weak as is the sight of man, I venture to pronounce that the ideas presented to his mind will be far more numerous, more grand and more sublime, than those which will enter the mind of the eagle. The one will see and perceive, the other will see but not perceive; and in this consists, I would fain believe, the gist of the question. I admit that brutes have, for the most part, senses more acute than man, but I assert that of the faculties of the mind possessed by man, brutes entirely want some, and are very defective as to the rest.

Perception, we were told, is the first operation in the mind of man. Man has the power of perceiving all ideas which enter his mind through the senses. Now I deny that the average brute has this power. Brutes in a state of nature live but to eat, drink, sleep, and propagate their species, and all their actions and occupations tend to one or other of these objects; I should, by the bye, have included the natural instinct of self-preservation amongst the motives of their actions and occupations. This being so, I conceive that they only perceive what relates to the particular object they have in view at any one time.

¹ Not the whole question: only that part of it which depends upon the difference between the mental faculties of man and the brute.

Thus the eagle, which I have pictured soaring along in the air, although the vast panorama must necessarily strike his sense of sight, would perceive nothing more than related to his purpose, some victim perhaps he would pursue, or some distant crag on which he would alight; the rest would be lost to him. I do not say that he might not feel some pleasurable sensations mounted up on high, and cleaving the air with his pinions, but this would be nothing more than an exhilaration of spirits from purely physical causes, affecting his bodily frame and not his mind; such sensations as the noble bird, when pent up in some aviary, might be supposed to pine for.

This want of general perceptive power is not difficult to imagine. How often do we, when engaged upon some one thing, fail to perceive objects which must have struck our senses! A sound may have set in motion the delicate mechanism of the ear, but, intent upon some purpose, we may never have heard it, because we have never perceived Of course the cases are not parallel: man can always perceive any idea of sensation if he wills, but I deny to average brutes the power to perceive any ideas that do not relate to one or other of the natural tendencies above mentioned. I say the average brute, because there can be little doubt but that the faculty of perception varies in different animals. No one, for instance, would credit a limpet or a cockle with so much perceptive power as an elephant. Yet I do not see, although it is as well to be on the safe side, that I need have made use of the word average after all; for if we enquire into the means whereby brutes have been trained to perform wonderful feats, and have had the faculties of their minds, so to speak, enlarged, and rendered more powerful1, we shall

¹ In this passage I do not wish it to be supposed that I think the mental faculties of brutes can be enlarged without limit: on the contrary, I believe

find that the effect, whatever it may be, has invariably been produced by turning to account the natural instincts of the brutes, as desire for food and for self-preservation.

I grant then that brutes have the faculty of perception, but only in a limited degree; let us see whether they are better off in respect to the other faculties possessed by the mind of man. We all know that brutes have memory. To make use of a most familiar instance to the point, what dog does not remember his master? Yet I am not ready to allow that the faculty of memory they have is the same as that which man has. It will be remembered. perhaps, that I divided the faculty of memory into two parts, Retention and Recollection. Now I think that brutes can retain an impression in their minds for a length of time, and that the presence of the object will at a future time recall the idea to their minds, but I deny that, when the idea has faded from their minds, they can of their own will recall it, think about it, if you like1, without the presence either of the object itself or of something which puts them in mind of the object. A dog knows his master, and when he goes away becomes distressed and disquieted, and shows his distress, perhaps, for some time, this distress being renewed so often as anything he knows to have belonged to his master, from having seen him in company with it, is shown him; but if the dog were removed from every thing that reminded him of his master, he would in time forget him, and would

there is a limit, and judging from the simplicity, for the most part, of the feats performed by trained animals, I think that limit is very soon reached. As has been well said, We think it a wonderful thing for a dog to dance, but we do not notice how ill he dances, for we are filled with surprise that he dances at all. I may add, too, that I believe contact with man to be necessary for the development to their fullest extent of the mental faculties of the brute.

¹ See Modes of Thinking in Brutes, p. 40.

not have the power to recall the idea of him of his own will, and without the presence of some object which would bring him to his remembrance. Here then is a notable difference and weakening of the faculty. A man who has once received a store of ideas could always think about them if he never received any more; but animals never recollect ideas, unless impelled to do so from some idea just received or continuously retained, or reintroduced. This is as much as to say that animals do not reflect. Indeed, I am of opinion that they do not at all, or very little. Retention of ideas cannot be called reflection, neither the recurrence of them upon the sensation of certain I do not believe that brutes properly reflect upon the operations of their own minds. But, to return to the faculty of memory, it has been urged that birds have the power of recollecting ideas at will, inasmuch as they not only learn to whistle a tune, but when they have once learnt it will, apparently of their own accord, go through the tune, and in the progress of it correct such wrong notes as they may have inadvertently introduced. I do not think, however, that because birds have been heard to do this we must argue that they can at will recall ideas without the intervention or except through the medium of external objects. They have been taught, in the first instance, to whistle a tune from hearing it constantly sung in their immediate proximity. Now the singing of birds is caused not from any will of their own so much as from a certain natural feeling or instinct, which leads them to break forth into song upon certain occasions and at particular seasons. The hearing of the tune would, therefore, in the first instance attract their attention from natural causes, so that they would both hear and perceive it, and when the impulse to utter vocal sounds came upon them they would, as a matter of course, choose

such notes, and such an order of notes, as by constant hearing and perceiving they had received a perfect idea of in their minds. I believe it to be the case, that professional bird-trainers adopt a system of attracting and retaining the attention of their pupils not only by covering and uncovering their cages at stated times, but also by alluring and rewarding them with attractive food, so that many external objects would remind them of the means employed to induce them to sing, and so, indirectly, of the song itself; besides this, too, never having been allowed to sing a wild song of their own; whenever their feelings (a certain exaltation of animal spirits it may be) prompted them to sing they would naturally choose the only tune they had ever learnt, whilst the remembrance of rewards, or the fear of punishment, would incline them to be as accurate as possible, and to correct false notes whenever dropped. I think, therefore, that they who assert that birds (for instance) have the faculty of recalling ideas to their minds at will have scarcely given sufficient attention to the subject, or they would not have delivered a positive opinion upon it. The other faculties of the human mind which I have enumerated in the preceding chapter are those of Discerning, Comparing, Compounding, Abstracting, and the faculty of Reason. The faculty of discerning is commonly said to be that whereby the mind distinguishes between its several ideas so as to avoid being misled by similitude or affinity into taking one thing for another. Now it is plain that brutes have this faculty, although in a somewhat limited degree. I believe that were two men never so like in appearance, shape, manner and speech, a dog would distinguish which was his master, and so discern a difference between the two more quickly than a man would; but, even in such a case as this, we can scarcely determine whether the better judgment of the

dog was not rather the consequence of the superior excellency of his senses, whereby he would be able to detect minute differences in speech and scent imperceptible to man, than of the possession of a faculty of discernment. I myself am inclined to the opinion that, although brutes do undoubtedly discern, they do not do so in the sense in which man discerns; that is, that where man employs a faculty of the mind they employ a sense of the body. Man, even when ideas of sense fail him, by reflecting, by comparing, and compounding, can arrive at a correct distinction in a roundabout and toilsome way, whereas the brute comes to the same conclusion at once, in consequence of receiving clearer simple ideas from his senses than man does from his.

Moreover, brutes require the presence of an object, or of something that reminds them of an object, before they can call what few faculties they have into operation. brute has in most instances very strong natural affections, and would feel the greatest distress were any of its young to be abstracted in its presence, but yet were they taken away in its absence it would return to its diminished litter, and never discover its loss. Of course the faculty of comparison must in such a case as this either be very weak, or, as I surmise, altogether wanting. suffer almost all the eggs upon which they are sitting to be taken away without perceiving what has been done, and will hatch the eggs of pheasants and other birds and tend the young ones as carefully as they would if they had been their own. Many animals, too, will suckle the young of other animals even under most contrary circumstances, as cats have been known to suckle rats and rabbits. We must, however, bear in mind that the natural feelings and instincts of the brute at certain seasons are so strong, that they are driven as it were, without any will of their own, to perform the functions commanded by nature, and in the case of brutes who suckle their young, when their offspring have been destroyed the physical relief afforded them upon the introduction of young mammalia, albeit of a different species, strongly inclines them to allow a continuation of the process, and thus gradually they begin to lavish upon the young of a different species the affections they would naturally have bestowed upon their own alone.

The abnormal conduct which has been observed in brutes in part results from the absence of the faculty of composition, for I suppose that brutes do not form complex ideas out of the simple ones they receive from sensation (I have previously stated that I do not believe they ever have ideas of reflection); for when they appear to form complex ideas, it is probably but a succession of simple ideas they have in their minds, which, recurring in a certain order, represent to them what a complex idea would to man. I agree also with Mr Locke in believing that brutes have not the faculty of abstracting or forming general ideas, and that this is an inherent defect in them, and not the result, as some might suppose, of a want of speech, for all possess in different degrees vocal organs, and some have been taught to utter connected sentences, but even then without a knowledge of their meaning, for although I have heard a parrot say "Polly's sick; call the

¹ In this opinion of mine as to the reason of the incongruous attachments sometimes formed by animals, I am confirmed by White of Selborne, who in Letter LXXVI. to the Hon. Daines Barrington, says, speaking of a cat that suckled a young leveret, "This strange affection probably was occasioned by that desiderium, those tender natural feelings, which the loss of her kittens had awakened in her breast; and by the complacency and ease she derived to herself from procuring her teats to be drawn, which were too much distended with milk; till, from habit, she became as much delighted with this foundling, as if it had been her real offspring."

doctor," yet I never was so extravagant as to suppose that the second sentence was uttered by the bird with a knowledge of its connection with the first, but only because it had been taught the two sentences, or the order of the words as they stood together, at one and the same time. Any one who has observed one of these amusing birds will be aware that they are in the habit at times of speaking all the words and sentences that have ever been taught them in a certain order, perhaps in the order in which they have learnt them, stringing them together without any general meaning whatever. I may add here, that the same arguments I have used to prove that singing birds have not the faculty of recalling ideas at will, applies also in the case of talking parrots. The want of articulate language then cannot be the cause that brutes have no general ideas, since we see many men with defective organs who yet manage to express general ideas by some contrivance or other. Mr Locke advances the opinion that the power of abstracting is not in brutes, and that the having of general ideas is that which puts a perfect distinction betwixt man and brutes. For my own part I cannot but think that the power of reflection, an inward sense as it were, which presents a man with an entirely new and different kind of ideas, such as the outward sense can never give him, puts a still more perfect distinction betwixt man and the brute than the power of forming general ideas, which could never be without the pre-existence of the power of reflection. And herein I do not take into consideration the possession by man of a conscience and a soul1.

¹ I have introduced the fact of the possession of a soul by man with reference merely to the question of distinction between man and brute raised by Mr Locke, not to the question at issue, into which I do not wish to import it. Of conscience, I treat subsequently.

Now, as to the faculty of reason, I believe with Mr. Locke, that brutes do reason, although, in consequence of the fewness or weakness of their other faculties, and the absence of ideas of reflection, that faculty is much weaker than, and partially different from, the one possessed by It has been urged that if we admit some brutes to have reason, we must admit all to have it, and in like degree; which is said to be absurd. In the first place, I do not allow the absurdity. All brutes may reason, for what we know. An oyster may reason, and reason well, but we, from our ignorance of that mollusc's habits and way of life, cannot affirm that it does, so neither ought we to affirm that it does not. Moreover, why should there not be degrees of reasoning power amongst brutes just as amongst human beings? Men vary in their reasoning faculties, so may, so in all likelihood do, brutes. ness or weakness of senses in some brutes, and their consequent lack of ideas and of perceptive power, may well cause their reasoning faculties to come short of the reasoning faculties of other brutes whose senses are acuter and whose perceptive faculty is more extensive. I think it quite reasonable to suppose that brutes do not all reason equally well, while at the same time I would not deny reasoning to an ovster simply because I had never witnessed in it any exhibition of such a faculty. I have said that I conceive the reasoning faculty of brutes to differ in some way from that of man, and not to be merely a low development of the same; and I do so on the following Brutes wanting certain faculties possessed by man, and which are largely employed by reason to assist it in arriving at correct conclusions, have fewer materials than man to work with, little more in fact than the simple ideas derived from the senses. Their manner of reasoning I conceive to be this, to perceive the connection be-

tween one simple idea and another, and again between that and a third, and so by degrees they connect a variety of intermediate ideas until they arrive at the idea required to be brought into agreement or disagreement with the first. Not that taking two ideas they ever set out with the purpose of discovering proofs, and gathering up and retaining in their memory the several links of the chain of ideas which connect the two; for I conceive that, although a brute may be able to perceive the connection between one simple idea and another, and so on successively until it has perceived the several connections with six different ideas (say), I do not suppose it could go back and recapitulate the several proofs, observing their mutual dependence, so as to mark with accuracy and be certain of, the necessary connection between the first and the sixth as man can. That is to say, that although they may perceive the connection in succession of the intermediate ideas between any two, they do not finally perceive the agreement or disagreement of those two ideas. reasoning is as it were tentative, and not having the power of gathering up and joining every link in the chain of proofs, they, as often as not, wander from the right track. and, misled by similitudes, the distinction between which they are not able to perceive owing to their weak discerning power, arrive at untenable and false conclusions. I think that brutes are often believed to display great reasoning power when in reality they do but act upon suggestions given them by the sensation of certain objects. such actions being right or wrong, or rather the several separate conclusions which have led to the performance of the several actions being right or wrong, according as the intellectual faculties of the animal are quicker or slower. to be put in motion; for I conceive that what we call dulness arises as much from the slow motion of the intel-

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lect, as from actual defect in its several faculties; indeed, we cannot but regard such slowness of motion to be in itself a defect and great hindrance to the play of all the faculties of the mind, which accordingly either rust and decay, or are never brought into operation at all, as we see to be the case in idiots and imbecile persons. To sum up the contents of this chapter, we find that brutes possess the same number and the same kind of senses as man', and that these are for the most part far sharper than man's, but that this excellency is more than counterbalanced by deficiency in the faculties of the mind, for that of the faculties of the mind of man brutes are entirely wanting in some, and very defective as to the rest.

It will be my task in the next chapter, after briefly touching upon certain peculiar phenomena to be observed with respect to the senses of man, and the faculties of his mind, to treat of intuitive knowledge, modes of thinking, and conscience.

1 Spallanzani is said to have discovered in bats a sense with which we are unacquainted. He hung up some cloths across a room, with holes cut in them at various distances, large enough to allow a bat to fly through; he then deprived the poor animals of sight and stopped up their hearing as much as possible, and found that when let loose they flew through the holes with as much correctness as if they had had the use of their eyes. I do not, however, deem this experiment conclusive, since I have heard of blind men who say they can always tell when they are coming up to a wall or hedge by the feel of the air. Might not then the bats have been guided by such a feel of the air?

CHAPTER IV.

THE SAME CONTINUED.

It is scarcely necessary for me to say that when many ideas enter the mind through the senses, only those are retained at all which have been perceived, and only those retained for any length of time which have been attentively observed. The reader may easily prove that this is so, for if he do but look at a landscape although at the time he is gazing at it, he shall appear to take in all with his eye, land, sea, rivers, houses, trees, &c. vet when he shall have ceased to view it, and shall have occasion to call up a picture of it in his mind, he will be surprised to find how little he has remembered of it beyond certain general features: a few minor particulars that especially struck his attention, such as a white house backed by dark foliage he may still be able to recollect, but beyond these the rest is but a mere outline of the landscape he looked upon. assertion I do not suppose will be controverted; not so however will it be, I suspect, with the one I am about to make, namely, that we cannot perceive the ideas received by two or more senses at the same time, that is, that we cannot perceive the ideas received from more than one sense at a time. "But," objectors will say, "we can surely hear sounds and see objects at one and the same time; we can at once perceive the beauties of the landscape and be charmed with the sound of a peal of

bells in the distance." Now this is just what I venture to assert we cannot do; we may fancy we can, because the movements of our mind are so quick that we can but with great pains discover when it changes from the perception of one idea to the perception of another. we are looking intently upon a certain object, I insist that we cannot hear a sound until our perceptive faculty moves itself from the contemplation of the idea of the object received through that organ of sense, the eye. I do not think that the faculty of perception, when it is closely applying itself to the idea of an external object received by one sense, can, at the same time, observe the idea of another object received through another sense. I have endeavoured by experiments to prove the truth of my assertion, and I fancy when I try to perceive two ideas, received through different senses at one and the same instant, I can almost distinguish the change of action of the perceptive faculty; for instance, when listening intently to a sound, I find that objects of sight are not really perceived by the mind, but the moment they begin to be perceived the perception of the sound It is as if the mind jumped from one idea vanishes. to another with a motion almost imperceptibly quick.

I am in doubt whether the mind can reflect on its own operations and at the same time perceive external objects; I almost think it can, but I would leave this to others more learned in the subject than I, and I would gladly hear from them whether in their opinion these conjectures of mine do in any way approach the truth.

Now, although I have asserted that the mind cannot perceive ideas received through different senses at the same instant, I have observed that it can perform operations without perceiving that it is doing so, and even whilst it is engaged in perceiving external objects of

sense, or reflecting upon ideas stored within it. For instance, a man may get into the habit of counting his steps as he walks, and so mechanical may the process become, that his attention may be drawn to external objects, or some recollection may be awakened in his mind to occupy it, and yet when he has withdrawn his attention, or ceased reflecting, and turns again to counting his steps he will find, the moment his perceptive faculty inclines to view the operation, that a number starts to his tongue, not that which he was counting at the moment his attention was taken off to something else, but another number, a higher one, and probably the exact one which would denote the sum of the steps he has taken, including those walked whilst he had apparently ceased counting, and was observing some external object, or reflecting upon some internal idea. Now I think this, if true, rather a curious operation of the mind, and one which I cannot account for. I cannot indeed positively prove that the mind works accurately when apparently not under supervision, but the circumstance has so often happened to myself, from whom I drew the instance, when from the shortness of the time during which the perceptive faculty was withdrawn to something else, and the consequent fewness of the steps taken, the probability that the mind was unconsciously counting right, was rendered, though not absolutely certain, yet probable in a very high degree. I give prominence to the instance I have quoted, because if my supposition be correct, the mind then works accurately without the guidance of the will. We often hear of people doing strange things when their attention is rivetted to some object, or when occupied in deep reflection, but then the perceptive faculty and the will are evidently diverted from surrounding objects, as much so IV.] BRUTE SENSES AND MENTAL FACULTIES COMPARED. 35

as in a dream, so that such instances should not be taken into account.

I have been led to make the last few remarks, because it has been urged by Mr Locke that although there are no innate ideas, no innate principles in the mind, yet that there is in the mind such a thing as intuitive. knowledge; which is certain, beyond all doubt, and in the discovery and assent to the truth of which there is no need of reasoning, since it is known by a higher and superior degree of evidence. This is as much as to say, that the mind is able to perceive the agreement or disagreement of certain ideas without the help of the faculty of reason. All so-called self-evident maxims. such as that "the whole is greater than its part," are of this sort. Mr Locke goes on to suggest that in this power of the mind of man immediately to compare some of its ideas, and perceive their agreement or disagreement, we have a small instalment in this mortal body of that superior kind of intelligence which in a future state shall appertain to our glorified body. Without venturing to make rash guesses at things which man can never know except by divine revelation, I ask my readers to be indulgent to me if they think me very extravagant in starting the notion that this so-called intuitive knowledge, this immediate comparison of the agreement or disagreement of two or more ideas without the use of reason. may not after all be acquired by the operation of that faculty working unperceived by the mind itself, something after the manner in which I supposed a man could continue counting correctly, although he did not perceive what faculty or faculties of the mind were employed in the operation. I think that some supposition of the kind is necessary if we would be consistent, for I venture to say that Mr Locke is inconsistent in asserting first

that the materials of all human knowledge are ideas of sensation or reflection alone; and secondly, that there is such a thing as intuitive knowledge, which would seem to imply that the mind has intuitive ideas; whereas we have just had it said, that the only ideas the mind can have are ideas of sensation, and ideas of reflection produced by a contemplation of the ideas of sensation.

Or, since the case may not to some seem analogous, inasmuch as in the one, perception is withdrawn from viewing the operation of the mind to contemplate some idea or to assist reflection, whilst nevertheless the aforesaid operation is carried on with success; and in the other, perception, though desirous of regarding the operation of the mind, is unable to do so, I would urge that this self-evident knowledge called intuitive is so simple, as to be perceived by the mind without the need of the conscious use of reason, and is indeed above proof. If this be so, we must limit this self-evident knowledge to such propositions as that "the whole is greater than its part;" and that "two bodies cannot be in the same place at the same time," and not call, as some do, our knowledge of our own existence, or of the existence of a God intuitive, for it is the very essence of intuitive knowledge that it be certain or beyond proof, not requiring the use of reason; but to solve such questions as the existence of ourselves, or a God, we do use reason, but we find our proofs insufficient for want of ideas. Something is required to complete the proofs of which we have no idea, and of course no words by which to express it. It may have been revealed to some, and they seeing it not to be contrary to reason (for if it were it could not be accounted a revelation from God), may have been perfectly certain of the fact of their own existence, and of the existence of a God. But even such favoured persons could give

us no help towards solving the question, although themselves acquainted with the correct answer, because the ideas they have received they would be unable to express or to make others comprehend. It would be as impossible for one who has seen the glories of the heavens revealed to him, and consequently received ideas other and totally different from those which man receives through his senses, or from reflection, ever so to describe them to his fellow-men, as to give them the same ideas he has, as it would be for a person to describe a colour to one blind from his birth. Language would contain no words for the new ideas, and no coined words could express to the listener what they would to the describer, since vocal sounds are but marks of ideas, and having no knowledge of the idea, the coined words would be but senseless sounds to all but him to whom the revelation had been made1. Direct revelation alone can give ideas other than those received by the senses; and traditional revelation can only endeavour faintly, by comparison with earthly objects of sense, to present a vague notion of the ideas revealed. In the revelations of St John we see not one new idea, we receive no new impression in our minds, we gain but a feeble notion of the glory of Him who sate upon the throne by learning that He was like a jasper and a sardine stone; the actual idea present to the mind of the writer he cannot possibly describe.

We, therefore, are at liberty to use our reason in com-

¹ Strange to say, we have some words for ideas which we never can receive into our minds. The human mind cannot conceive the idea of infinite extension, or of when time shall be no longer, and yet the words space and eternity are the external marks of those ideas. The fact is we comprehend the idea we would express by the word eternity, although we cannot conceive it.

ing to a decision as to whether traditional revelation be really revelation or not. If it be not contrary to reason we believe it by faith; not because we have proved it to be true. I would say, moreover, as to our own existence, that since we require one or more ideas which without revelation we can never obtain, we can never prove the certainty of it. Our reason may show the probability of our existence to be so great that we ought to receive it for as good as certain, but that is as far as we can go, and so it is with the existence of God. Everything around us, about us, in us, our very selves point to the existence of a God; the probability of it is so great that we should be more than fools were we to reject the conclusion to which all these things lead us; but by reason of a lack of certain utterly new ideas which can only be received by direct revelation we cannot be completely certain of the fact of God's existence, and even if direct revelation of the truth of the fact were accorded us, we could not in any possible way demonstrate the truth of it to others.

I have spoken of intuitive knowledge, although the question may not seem to bear much upon the subject of this Essay, because in my humble opinion much of what is termed instinct in brutes is really intuitive knowledge, and not a little attributable to the use of the faculty of reason.

I believe that instinct impels brutes to adopt a certain course of action, and that intuitive knowledge and reason teach them the best way of carrying it out. I conceive, for instance, that instinct urges birds to build nests, and that intuition and reason aid them in the selection of materials, and in the construction of the fabric. I am inclined, too, to infer that much of the knowledge possessed by brutes is intuitive, because we find, with rare exceptions, that it never advances beyond certain limits, that it

is not progressive, cannot be added to or increased as man's knowledge can. Not that I would hereby be supposed to imagine that brutes learn nothing by experience. We know that experience is man's great teacher, and I am not disposed to assert that brutes learn nothing from it. Intuitive as a great deal of their knowledge is, we find that brutes kept in captivity, for a length of time, would perish if let loose from inability to procure food, having had no experience as to the right mode of attaining it. An instance of the above rises to my mind in the person of an owl kept in a cage for many months, having been taken when hardly fledged. This bird after it was grown up escaped one day, and was missing for a week, when it was discovered in a very feeble and emaciated condition, evidently never having tasted food since it had gained its freedom, in consequence of its total inexperience of matters connected with the pursuit of its prey, and not as some might suppose from incapacity of flight, since it was then full grown, and was seen on the wing for several evenings after it escaped, indeed in the first instance it fled from off my own hand over the roof of a house and into some tall trees. There is, however, some kind of knowledge with which experience has nothing to do, for birds build their nests and breed in captivity even when taken quite young from the nest, and such knowledge I conceive to be the joint production of instinct and intuition. Animals vary a great deal in respect to intuitive and experiential knowledge. Anything more helpless than a callow sparrow or a blind puppy can scarcely be imagined, they both require much knowledge from experience before they can get on in the world; not so, however, with young chickens or young partridges; they are no sooner out of the shell than they seem to be up to everything, and when only a few hours old will wander in search of

food, scratch up the ground, and catch insects with all the dexterity and aplomb of an old hand.

The reader will, perhaps, remember that in a former part of this Essay I gave it as my opinion that brutes do not properly reflect, that is, do not at will pause and view the operation of their own minds, and so gain a new set of ideas separate and in part distinct from, though originating with, ideas of sensation. He must not, however, suppose from this that I would utterly deny to brutes the power to think. Far from doing so, I have already acknowledged that they do think; for remembrance is a kind of thinking. The fact is, there are several modes of thinking; indeed, we think whenever we make use of any faculties of our minds, and man when awake never is without thought. Reflection is but one mode of thinking, although perhaps the principal mode. We have, besides, Remembrance, Recollection, Reverie, and Attention. Now of these I would only deny to brutes Reflection and Recollection. I have pointed out my reasons for so doing in a previous chapter, and have there shown the difference that exists between recollection and remembrance. I grant then to brutes so much of the power of thinking as is understood in the words Remembrance, Attention, and Reverie. And if any one will say that it is impossible for the mind, whether of brute or man, to think without reflecting, I would ask him which a child soonest does, thinks or reflects, and if he would assert that it reflects as soon as it begins to think, I must ask him, since reflection consists in the contemplation by the mind of its own operations, how those operations could be carried on without thinking; for if

¹ I am confirmed in my opinion that brutes do not reflect, and are limited to certain modes of thinking, when I consider how cramped they must be for want of external marks of internal ideas, such as words, signs, &c.

thinking and reflection were coincident in point of time, and thinking had not commenced before reflection, then would the mind have nothing to reflect upon, and consequently no reflection, but must for ever remain a blank. That brutes think is evident, not only by reason of their actions when awake, but also of their dreams by night, for that dogs do dream of hunting, and will bark and move their feet in their sleep, as if actually in the field, is a common occurrence; so that if the mind when wandering without control thinks, so much the more I fancy would it think when guided by the will. Lest, however, some should say that by admitting the mind of brutes to think whilst they sleep, with their senses shut off from external objects, I allow them what I have hitherto denied-ideas of reflection, I would urge that when the mind dreams, either in man or the brute, some indistinct ideas must come through the senses, and start as it were a train of thought; as, for instance, the slamming of a door has not only waked a man, but raised in his mind a series of connected impressions, which have passed with such rapidity through the brain, that the very cause itself has seemed to be the last idea, not that of a door slamming, but of a pistol fired off in a duel, the previous impressions all leading up to such a sequel. In the case of the dog too, when for the space of several hours one idea, that of the pursuit of game, has possessed his mind, the impression may not have worn out when sleep has overtaken the body, whilst the very feelings of the body, the pains in the limbs from the fatigues it has undergone will all suggest ideas to the mind through the sense of touch. I have observed also that dogs more frequently dream when thoroughly tired out by a long day's sport, than when they fall asleep under ordinary circumstances. brutes think in the same way that human beings do when

they are said to pay attention to anything, is obvious enough if we do but take notice of the animal from whom I have so frequently drawn my illustrations, the dog, who without much doubt, I should say, thinks attentively when following game, so engrossed does his mind appear to be with the business he is performing. I have stated previously that the mind of man when he is awake always thinks, though very often loosely and unconnectedly, as in reverie. We can prove that this is so by merely taking notice of our own thoughts. We cannot, however, prove that the mind of brutes always thinks when they are awake. I imagine it, however, reasonable to suppose that it does think, but, forasmuch as it does not reflect on its own operations, I should conceive such thought to be of the nature of reverie, where ideas float through the mind, leaving faint impressions hardly taken notice of by the understanding. I believe this to be the case, moreover, from observing that brutes, when not actively employed in the pursuit of prey, the search after food, or in the performance of such operations as instinct enjoins them to undertake, do mostly pass their time either in sleep, or in such a state of repose as precedes sleep, when, as we know from experience of our own minds, ideas float through it without being observed, or attentively thought on by the understanding.

I hold therefore that brutes possess those parts, or, more properly speaking, phases of consciousness termed attention, remembrance and reverie, and I conclude accordingly that they possess consciousness, but denying to them, as I have done, recollection and reflection, I would infer that theirs is not identical with man's consciousness, but is rather a modification thereof.

Although, then, I believe brutes to possess consciousness, I do not think that in them it produces

what we call conscience, which is our own opinion of our own actions. Many persons suppose that in conscience man possesses an inward monitor, which enables him to distinguish with the greatest accuracy between moral right and moral wrong, so that they would speak of one who had committed some immoral act as altogether wanting in conscience, or having it, to have acted contrary to its dictates. This, though the popular view of the subject, cannot, I conceive, be the right one, inasmuch as we see that a man of one nation will assent to moral rules, and be convinced of their obligations, which a man of another nation will with equal self-complacency utterly neglect. I agree therefore with Mr Locke in supposing that conscience judges a man's actions to be good or bad agreeably to his education, company, and the customs of his country, so that an action which the conscience of one man may disapprove, the conscience of another, differently brought up, under different circumstances, may It is then the different conditions of society which causes the conscience of one man to differ from the conscience of another; and yet notwithstanding its variable nature, it is conscience which binds society together, and enables men to live in communities, since it alone leads men by the aid of reason to assent to such moral rules as may be held binding in the several communities, for the contrarieties to be observed in the consciences of men do not prevent their functions from being the same in each individual.

Of a conscience, then, such as man's, I do not believe the brute to be a possessor. I do not think he can form any judgment as to the moral rectitude or purity of his own actions. Instances have been recorded in which brutes have been supposed to exhibit some traces of a conscience, in betraying so-called remorse for guilty actions, but in no case that I am aware of could such a feeling not be referred either to some of their natural appetites, or to the instinctive desire for self-preservation as evidenced by a fear of punishment. This so-called remorse generally shows itself in the brute by a cringing behaviour, consequent upon remembrance of actions which have invariably met with punishment, which punishment the brute would by such behaviour either endeavour to escape from altogether, or at least mitigate in severity.

The moral duties of the brute are, as I shall demonstrate in the next chapter, so few, as not to need conscience to aid in their proper fulfilment.

It is true that our knowledge of the habits, manners, and customs of brutes is in many cases very defective. In forming a judgment upon the present question we must take such knowledge as we find it, and decide as best we can, with the insufficient data at our disposal, giving to the brute, where any doubt exists, the benefit of that doubt.

CHAPTER V.

CONCLUSION.

MAN is preeminently a social animal. He cannot exist in happiness without the company of his fellows. race of people have ever been discovered, who, living in pairs of male and female, have had no further communication with the rest of their species. Solitary confinement is a punishment, the intolerable effects of which the most hardened criminals have never been proof against; indeed, so horrible is it, that they who would abolish capital punishment and introduce in its stead solitary confinement have been taunted with cruelty, in wishing to substitute for death a penalty so much the more ter-We can, indeed, call to mind occasional instances of men (whom the world has generally credited with madness) who have voluntarily preferred to live a life of entire seclusion, without so much as seeing one of their own kind, but the very rarity of these exceptions only proves the general rule. The mental endowments of man, which I have endeavoured to set forth in previous chapters, point out in an especial manner how fitted he is to enjoy the society of his fellow-men. Where would be the use of those comprehensive faculties of his mind? where would be the use of language, if a natural desire for the society of others of his species had not been implanted in man? The whole aim and object of the preceding chapters have been to set side by side the respective natural desires and intellectual capacities of man and the brute; that by observing them attentively we may determine how far each is fitted for the society of the fellows of his species, and to what degree of complexity each may carry his social relations; for upon these points, as I hope presently to show, the whole question at issue depends.

In primitive times society was of a very simple kind; each family was able to supply the few objects of its wants by the labours of the individual members composing it, so that the necessity for intercommunication was small, but as men gained new ideas, felt new desires, and new wants, and strove to put their new ideas to some practical use, and so to supply not only their own wants but the wants of others, social relations became more complex. The advantages of a division of labour were soon made apparent, and men took to confining themselves to certain operations, to the making of particular articles which they would exchange for the common necessaries of life with others, who perceived that they gained more by obtaining such articles by bartering food or clothing for them than by manufacturing them at home; and in this manner were laid the first foundations of trade and commerce. Then again, as certain individuals by reason of their greater enterprise, greater ingenuity or greater local advantages, acquired more wealth, more territorial possession, more power and influence than their neighbours, social differences, depending upon rank and position, arose, which materially increased the number and intricacy of man's social relations. The strong were tempted to oppress and despoil the weak; whilst the weak could only offer an effectual resistance by uniting their forces, and joining in a common league

against the strong1. Different habits, manners, and customs prevailed amongst different nations, determined. some by local causes, some by natural disposition and temperament, and some by the arbitrary will of despotic rulers; but the more advanced any nation became in the arts of civilization, the higher became the intellectual standard of the people, the greater the intercommunication of ideas between individuals, and the more complex and artificial the system of society. It is evident that for all men to reap the advantages of social intercourse, certain duties must be performed by them one towards another, certain obligations must be felt and acted upon by all in their several dealings with one another, however simple or however complex the state of society may be in which they may happen to live, always premising that a simple form of society requires few duties to be performed, few obligations to be imposed, and a complex form many. Hence arose the doctrine and practice of morality, which is nothing more than the teaching and performance of the duties of men to one another: such duties varying according to the habits, manners, and customs which may obtain in different nations, so that what may be deemed bad morality in one nation may be deemed good in another; but whatever the variation or contradiction of duties and obligations, the foundation of all morality is laid down in the maxim, that man should do unto his neighbour as he would be done by, or as the

^{1 &}quot;If we go back to a very early period of society we find a state of things in which, as between one individual and another, no law obtained; a state of things in which the first idea almost of those who desired to better their condition was simply to better it by the abstraction of their neighbours' property." Speech of the Right Hon. W. E. Gladstone, Chancellor of the Exchequer, in answer to an address from the Parliamentary Reform Union of Glasgow. Glasgow, Nov. 1, 1865.

Evangelic law puts it, that he should love his neighbour as himself.

In order, therefore, to practise morality, to perform his duty to his neighbour, man has to repress many natural desires, to stifle many natural wishes, to forego many advantages, to conquer many temptations, and to exercise much mutual forbearance. In a rude state of society, therefore, where man has not learnt to restrain his passions and lusts, morality will be at a very low ebb, and although preached will assuredly not be practised; but in refined and polished society, where the duties of life are manifold, the practice of morality is the mainstay of the whole fabric, without it the society could not exist in its civilized form for one instant; and men become so aware of this, that the more important duties of life are enforced by stringent laws, whilst others are so upheld by public opinion, that any infringement of them, or even a non-performance of them, would bring down upon the offender everlasting disgrace.

We find, then, that man by his natural sympathies has a great desire to consort with others of his species, and that he is furnished with intellectual faculties of so high an order as to enable him to enter into those complex relations with them which, in civilized nations, are comprehended under the name of society, without detriment to individual interests, inasmuch as by means of those mental faculties he perceives the necessity under which he lies of practising morality in his intercourse and dealings with his fellow-men.

Turning now to the brute creation, we shall find that the desire for society of some kind, or rather an intense dislike to solitary existence, prevails amongst the greater number of its members. That great observer of animated nature, White of Selborne, says, "There is a wonderful

spirit of sociality in the brute creation, independent of sexual attachment; the congregating of gregarious birds in the winter is a remarkable instance." He goes on to remark that many horses, though quiet in company, will not stay one minute in a field by themselves; that oxen and cows will not fatten by themselves; but will neglect the finest pasture that is not recommended by society. is this propensity, he adds, confined to animals of the same species; for that a doe brought up with a dairy of cows has been miserable when not in their company, and that two such incongruous creatures as a horse and a hen, spending much of their time in a lonely orchard, where they saw no other creature but themselves, have come to have a great regard for one another, the fowl approaching the horse with notes of complacency, and the horse looking upon her with satisfaction, and moving with the greatest caution lest he should trample on his diminutive companion. Many animals, too, who in the breeding season live apart in couples, upon the approach of winter assemble in herds and flocks, as if to enjoy one another's society.

In fact, we could multiply instances without number of the spirit of sociality which pervades the brute creation; but I think we must not imagine from them that the society of brutes is to be taken in the same sense as the society of man. The same natural desires urge man and the brute to assemble with others of their species, and, in the case of the latter, with animals of a totally different species; the same sympathies which man feels towards his fellow-men exist in some degree in the brute; for brutes have been known to exhibit towards their mates a higher degree of affection than would arise out of mere sexual attachment, and Lord Kaimes cites the case of a canary, which fell dead in singing to his mate while in the act of incubation. The female quitted her

nest and, finding him dead, rejected all food and died by The natural affections of the brute are often much stronger than those of man, which fact may in part be accounted for by the defect of the faculties of the mind. In the case just mentioned, the poor bird bereaved of its mate had none of the consolations which a reasoning faculty such as man's might have afforded it; the little glimmer of reason it might have possessed was extinguished by the outburst of natural affection; and so it died. The superior mental endowments of man enable him in an especial manner to bear up under misfortune. What woman, deprived of her husband by sudden death, could not, after the first ebullition of grief was over, have suggested to herself many reasons for not dying as well? Reason would urge her to check her sorrow for the sake of her children or her relatives, and when the time for halfmourning had arrived, would hint that the loss was not irreparable, that the departed might be replaced by perhaps a more eligible parti, and so the drooping plant would raise its head and live1.

To return more immediately to our subject, I believe the essential difference between man's society and the brute's society to be this, that whereas the two great motives which regulate the proceedings of the brute creation are love and hunger: the former inciting animals to perpetuate their kind, the latter inducing them to preserve individuals, all other motives being subordinate to these two; there can be little doubt that, joined with the almost universal dislike to a solitary life which prevails among brutes, one or other of these motives, or both,

Hamlet's Soliloguy on his Mother's Marriage.

¹ "O heaven! a beast, that wants discourse of reason, Would have mourned longer."

induce the several members of the brute creation to seek the society of their fellows. Now with man the same motives prevail in regulating his proceedings to a considerable extent, but not nearly so much so as with the brute. In a simple state of society these motives outweigh most others, but as population increases, and arts of civilization are learnt, other motives arise, in some instances far more powerful (that is, when daily sustenance is as plentiful as we see it to be in civilized nations). Ambition, the desire to acquire fame, or wealth, or both, influence men's actions often to a far greater extent than either of the aforesaid motives-love and hunger. society departs more and more from its original simple state, so do conflicting interests spring up, new desires arise, all increasing the intricacy of the relations between man and man. The primary motives which have induced men to assemble together, to seek one another's society. are lost sight of in the multitude of others which these new interests, new desires, call forth; so that we arrive at this distinction between the society of man and the society of the brute, namely, that the one has always remained in its original simple state, and the other has increased in complexity in proportion as nations or individuals become more highly civilized. Starting with the same primary motives for seeking the society of their fellows, man has vastly outstripped the brute in consequence of having been endowed by his Creator with superior mental faculties, and with more excellent vehicles for the intercommunication of ideas.

The relations of man to man are susceptible of variation and increase; the relations of brute to brute are not. The motives of man for seeking society are continually changing; the motives of the brute are stationary. The society of man varies in kind, and can be carried to any

degree of complexity; the society of the brute never varies in kind, and is always simple. These propositions bring us at once to the question at issue, for it is evident to the meanest capacity, that a simple form of society requires few duties of life, a complex society many.

I have already stated in what the duties of life consist, so far as man is concerned, and have also shown that they necessarily exist in all stages of society, although they are frequently overlooked, or disregarded, in very early and primitive times. I have also said that, in order to perform these duties in civilized society, i.e. to practise morality, man has to repress many natural desires, to stifle many natural wishes, to forego many advantages, to overcome many temptations, and to exercise much mutual forbearance. Now I suppose no one will be so extravagant as to assert that the brute practises morality in the sense in which man practises it. Individual instances of forbearance and self-denial on the part of brutes have been alleged by different writers on natural history, but taking the brute creation as a whole, I think I may fairly say, that brutes obey the dictates of their appetites and passions, and follow their own inclinations without regard to the interests or desires of their fellows, nay, that in most cases the law of might prevails over the law of right, that the weak almost invariably go to the wall2. The fewness

¹ See page 51.

Since I have written the above, I have met with the following passage, strongly confirming my opinion, from the pen of an acknowledged man of eminence. "For as the law of force is the law of the brute creation, so, in proportion as he is under the yoke of that law, does man approximate to the brute; and in proportion, on the other hand, as he has escaped from its dominion, is he ascending into the higher sphere of being, and claiming relationship with deity." Valedictory Address of the Right Hon. W. E. Gladstone, M.P. Chancellor of the Exchequer, and Rector of the University of Edinburgh, November 3, 1865.

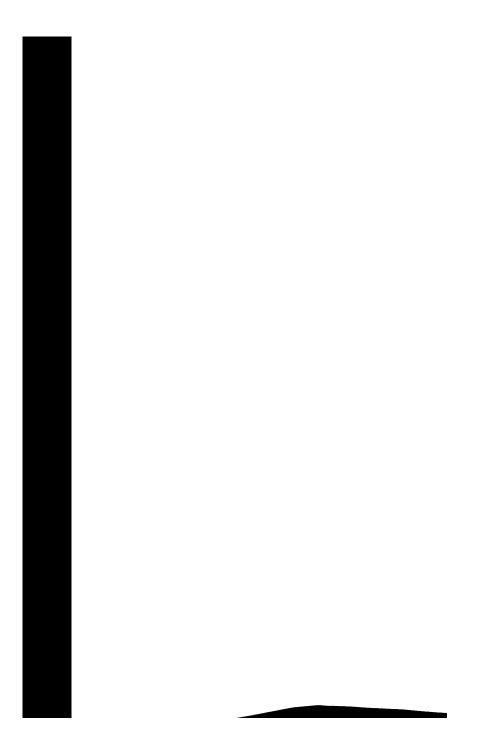
of the duties of life amongst brutes, arising as it does out of the simple state of their society, causes the neglect of their performance to be little felt; in fact, it may be urged with some show of reason, that since none are performed, none exist. I would not, however, infer from the nonrecognition of certain duties that such duties do not exist at all. Man in a savage state performs few moral duties; he ignores them in order that he may follow his inclinations the more unrestrainedly. The motives which govern the actions of brutes are urgent and ever present to them. To take merely one—hunger. The necessity for providing food in a wild state is a duty, a pressing necessity, the knowledge of which, together with the natural instinct of self-preservation, urges the brute to provide for himself without regard to the interests of others; but at certain seasons, and under certain circumstances, he can exercise some forbearance on this very point. Animals provide for the wants of their young before they satisfy their own, and the common cock will not partake of any dainty morsel he may have discovered until he has called his hens to share it with him.

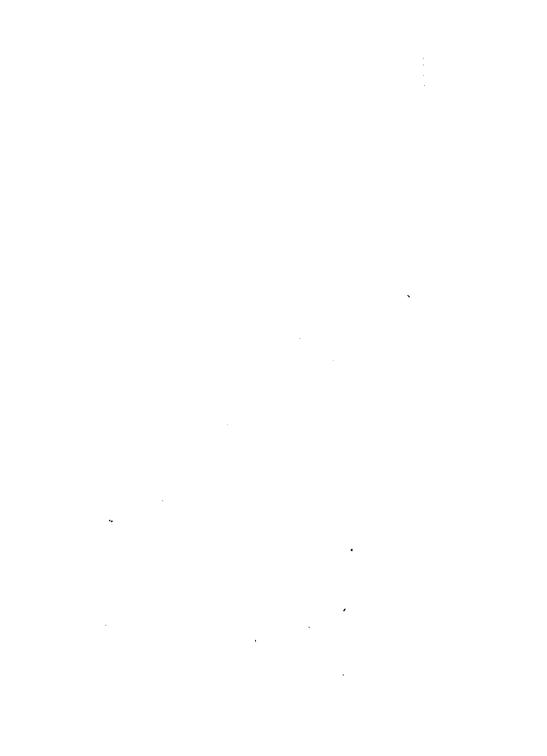
To conclude. We find man and the brute alike inclined by nature to seek the company of their congeners; but that by reason of the superiority of his mental faculties and the excellency of the means at his disposal for intercommunicating his ideas, man can enter into much closer relations with his fellows than the brute can with his, and that thus the society of man is of a much more advanced kind than the society of the brute; and that, as all society has duties of life in connection with it, which are few or many in proportion as the society is complex or simple, the practice of such duties being termed morality, so man has need to use much morality, and the brute has need to use little; that again, the superior facul-

ties of man enable him to perceive a necessity for such morality, which the inferior faculties of the brute would not enable him to perceive; and that, lastly, man (Christian man, at all events) has been furnished with a guide to moral conduct, by means of which he can at all times distinguish between what is good and what is evil, whereas no such guide has, so far as we are aware, ever been vouchsafed to any member of the brute creation.

THE END.

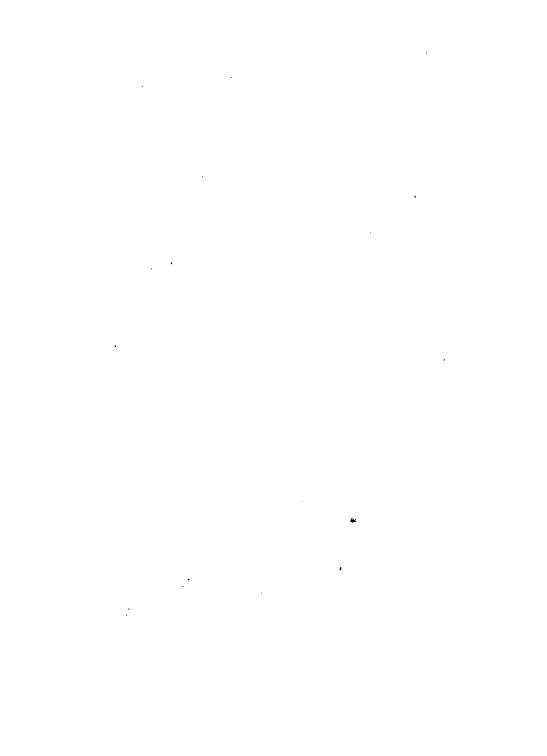
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